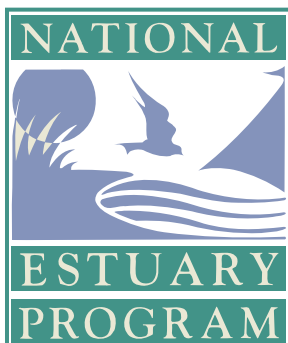


Protecting Our Oceans and Coasts

We Americans are deeply connected to our coastal waters. In fact, more than half the nation's population—139 million people—live along our country's shorelines. Because of increasing pressures on our fragile coastlines, OWOW has placed special emphasis over the past decade on building new partnerships among governments, citizens, businesses and other stakeholders. However, the continuing migration of our population to the coasts and the fragile resources of this coastal fringe mean that a safe and certain future has not been secured.

The National Estuary Program

Since its inception in 1987, the National Estuary Program (NEP) has continued to bring communities together to protect and restore their estuaries. There are now 28 estuaries in the program, and each of them has developed or is developing a Comprehensive Conservation and Management Plan (CCMP), to be used as a blueprint to guide restoration and preservation activities in the estuary. Within the past 10 years, 23 estuary programs have completed their CCMPs; they are now implementing action plans. The remaining five programs are expected to have final CCMPs in 2001. Many accomplishments have been realized through the NEP, most notably the restoration and protection of almost 1 million acres of habitat nationwide.



The watersheds of the National Estuary Program

23 National Estuary Programs with Approved CCMPs

Program	Approved	Designated
Puget Sound	May 1991	1987
Buzzards Bay	April 1992	1987
Narragansett Bay	Jan. 1993	1987
San Francisco Bay	Dec. 1993	1987
Albemarle-Pamlico	Nov. 1994	1987
Long Island Sound	Nov. 1994	1987
Galveston Bay	March 1995	1988
Santa Monica Bay	March 1995	1988
Delaware Inland Bays	June 1995	1988
Sarasota Bay	Oct. 1995	1988
Delaware Estuary	Sept. 1996	1988
Massachusetts Bay	Sept. 1996	1990
Casco Bay	Oct. 1996	1990
Indian River Lagoon	Nov. 1996	1990
Barataria-Terrebonne	Dec. 1996	1990
Tampa Bay	March 1997	1990
NY/NJ Harbor	March 1997	1988
Coastal Bend and Bays	Feb. 1999	1992
Maryland Coastal Bays	Oct. 1999	1995
Columbia River	Oct. 1999	1995
Tillamook	Dec. 1999	1992
San Juan Bay	Oct. 2000	1992
Morro Bay	Jan. 2001	1995

Air-Water Initiative

Over the past decade, we have discovered that coal-fired power plants, automobiles, and other sources of airborne pollutants are a major cause of water pollution, affecting many of our estuaries and coastal waters. The Air-Water Initiative, which began in 1995, is part of the Office of Water's efforts to assess the problem of air deposition of pollutants and to find solu-

tions that protect water quality. An Air-Water Coordinator has been designated to facilitate communication among the EPA



Steve Delaney, U.S. Environmental Protection Agency



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Office of Water, Office of Air and Radiation, other EPA offices, and other federal agencies. The initiative has also funded atmospheric deposition monitoring and assessment in various coastal areas, workshops aimed at both scientists and managers, education materials and training, and other outreach activities designed to focus attention on air pollution impacts on water quality.

Harmful Algae Blooms and *Pfiesteria*

Following toxic outbreaks of *Pfiesteria* along the eastern seaboard in 1997, the White House called for a centralized federal response capability in the event of future outbreaks. In response, EPA and NOAA led the development of the *Federal Event Response Plan for Harmful Algal Blooms: An Initial Focus on Pfiesteria, Fish Lesions, Fish Kills, and Public Health*. The plan responded to state requests for assistance during major outbreaks, and it was distributed in 1998. EPA also funded 11 state agencies in the eastern United States and along the Gulf of Mexico to support existing and new rapid response and monitoring programs for *Pfiesteria*, funded a clearinghouse for *Pfiesteria*-related information, and developed a fact sheet for the public in English and Spanish.

Shellfish Beds Reopened in Buzzards Bay

Buzzards Bay in southeastern Massachusetts is known for its variety of habitats, including salt marshes, tidal streams, eelgrass beds, tidal flats, barrier beaches, and rocky shores. The bay is one of 28 estuaries in the National Estuary Program.

Over the years, cumulative impacts of local land uses, such as agriculture, industry, and recreation, have degraded water quality and contaminated shellfish beds. To address these threats, the Buzzards Bay NEP has worked with local and community organizations to implement innovative solutions.

High levels of fecal coliform bacteria, conveyed principally from storm water, were found to be the major cause of shellfish bed closings, so watershed partners worked together to fashion a solution. They developed a 3-acre constructed wetland system to remove sand, silt, trash, and other debris from storm water discharges. Thanks to reductions in bacteria levels, more than 4,000 acres of shellfish beds have been reopened. The shellfish bed restoration strategy is typical of water quality efforts in the Buzzards Bay watershed. For each problem identified, coordinated education efforts, restoration activities, and monitoring activities are undertaken to improve the area's water resources.

Ocean Survey Vessel *Peter W. Anderson*

The 165-foot-long *Peter W. Anderson* is an ocean-going vessel that assists the EPA regions in coastal and marine survey and monitoring operations. The majority of the *Anderson's* missions involve surveys for designation and monitoring of ocean dredged material disposal sites; however, included in its approximately 30 missions per year are water quality surveys, public outreach efforts, coral reef studies, public health surveys of municipal sewage outfalls, evaluations of the impacts of deposition of pollutants into coastal and marine areas, and international assistance activities in the Wider Caribbean area. Among the ship's accomplishments in the past decade are providing substantial assistance in surveying damage from a large petroleum spill in the Delaware River and locating for recovery operations several arsenic trioxide canisters lost from a container ship during a severe storm in the Atlantic Ocean.

Kennard Potts, U.S. Environmental Protection Agency



Vessel Sewage Discharge Program

Over the past 10 years, OWOW has increased its outreach efforts to make states aware of their authority, under section 312 of the Clean Water Act, to designate all or part of their waters as a no-discharge zone (NDZ) for vessel sewage. The results have been a significant increase in the number of states involved in the program and an overall increase in the number of NDZs. Currently, 18 states have all or portions of their waters designated as an NDZ for vessel sewage, resulting in 71 NDZ designations nationwide. A major benefit of the designations has been the reopening of some shellfish beds previously closed because of fecal contamination.

Uniform National Discharge Standards

EPA has partnered with the Department of Defense (DOD) to promulgate Uniform National Discharge Standards (UNDS) to regulate discharges incidental to the normal operation of DOD vessels. In 1999 EPA and DOD promulgated a joint rule that identified 25 discharges, such as bilge water and gray water, that required control. The rule also identified another 14 discharges that were determined not to require control. EPA and DOD are now developing performance standards for the 25 discharges based primarily on potential environmental impacts and feasibility.

Cruise Ships

OWOW is currently conducting a national assessment of the cruise ship industry in response to a petition received from the Bluewater Network on March 17, 2000. The petition asked OWOW to assess whether discharges from cruise ships are harming the marine environment. The assessment should be completed in 2001.

Capacity Building

OWOW provides extensive technical support and training opportunities to help build capacity at the local level for coastal watershed protection. Over the past 10 years, OWOW has sponsored numerous workshops and training sessions on the following topics:

- Regulatory and nonregulatory tools available to local decision-makers for protecting their coastal resources.
- Volunteer monitoring in estuaries.
- Land use impacts on water quality; development of comprehensive environmental monitoring plans for NEPs.
- Solutions to build capacity for addressing long-term funding challenges in estuary programs; negotiation and facilitation skills.
- Creating alternative futures scenarios to address growth impacts in coastal environments.

